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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/743,054	02/15/2001	Zhe Lu	PENN-0742	3242
26259	7590	06/07/2004	EXAMINER	
LICATLA & TYRRELL P.C. 66 E. MAIN STREET MARLTON, NJ 08053			CELSA, BENNETT M	
			ART UNIT	PAPER NUMBER
			1639	

DATE MAILED: 06/07/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/743,054

**Applicant(s)**

LU, ZHE

**Examiner**

Bennett Celsa

**Art Unit**

1639

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-14 are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |  |
|---|--|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____  |

## **DETAILED ACTION**

### ***Status of the Claims***

Claims 1-14 are currently pending.

### ***Election/Restrictions***

Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

Group 1. claims 1, 7 and 8, drawn to a tertiapin-like alpha helix compound and composition (e.g pharmaceutical) thereof.

Group 2. claims 2-4, drawn to 1<sup>st</sup> method (e.g. in vivo) of using a tertiapin-like alpha helix compound to inhibit the activity of inward-rectifier potassium channels.

Group 3. claim 5, drawn to a 2<sup>nd</sup> method (e.g. in vivo) of use of a tertiapin-like alpha helix compound to identify compounds.

Group 4. claim 6, drawn to a 3<sup>rd</sup> method (e.g. in vitro) of use of a tertiapin-like alpha helix compound to identify compounds.

Group 5. claim 9, drawn to a 4<sup>th</sup> method (e.g. in vivo) of use of a tertiapin-like alpha helix compound to control insulin secretion .

Group 6. claim 10, drawn to a 5<sup>th</sup> method (e.g. in vivo) of use of a tertiapin-like alpha helix compound to control cardiac rhythm and electrical conduction.

Group 7. claim 11, drawn to a 6<sup>th</sup> method (e.g. in vivo) of use of a tertiapin-like alpha helix compound to induce diuresis.

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Group 8. claim 12, drawn to a 7<sup>th</sup> method (e.g. in vivo) of use of a tertiapin-like alpha helix compound to modulate neurotransmission.

Group 9. claims 13-14, drawn to an 8<sup>th</sup> method (e.g. in vivo) of use of a tertiapin-like alpha helix compound to rationally design drugs.

The inventions listed as Groups 1 to 9 do not relate to a single inventive concept under PCT Rule 13.1 because under PCT Rule 13.2. they lack the same or corresponding special technical features for the following reasons:

pharmaceutically active tertiapin-like alpha helix compounds are known in the art. E.g. See Hider et al. Biochimica Biophysica Acta. Vol. 667. (1981) pages 197-208. Accordingly, there is no special technical feature which links the compounds and compositions to their methods of use.

Additionally, the methods of Groups 2 to 9 lack a special technical feature (e.g. the compound is known) and further the methods address different objectives and/or utilize different protocols and method steps so as to constitute distinctly different methods.

Still further, the search of Groups 1 to 9 represent different and separately burdensome manual/computer bibliographic search in patent and literature databases.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

**Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bennett Celsa whose telephone number is 571-272-0807. The examiner can normally be reached on 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Wang can be reached on 571-273-0811. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Bennett Celsa  
Primary Examiner  
Art Unit 1639

BC  
June 2, 2004

